

1972 proposal for reclassification suggested eliminating from wilderness status most of the presently reserved area of the Trinity Alps that Ferlatte studied. This is in spite of an annual almost 10 percent increase in recreational use over the last 5 years according to the Forest Service. The obvious answer to the current problem of too much use of wilderness, so much that use must be rationed, is to dedicate more lands to wilderness use from areas that are *de facto* wilderness. The Forest Service has allowed an ostensibly mining road into the heart of the area to persist, and entries under the 1872 Mining Law have been used to acquire title to public land. However, most commercial ore or placer deposits were mined out 30 years or more ago. Alternate sections in most of the proposed exclusion are owned by the Southern Pacific Railroad, and the Forest Service cannot acquire these lands without appropriations, which Congress and the executive branch have not made available. The obvious temporary solution is to classify as wilderness those sections (often in contiguous blocks of more than 5000 acres) that are federally owned and rely on local good sense plus zoning to see that privately owned lands are not "developed" in ways that destroy public values. One of these values is the flora that Ferlatte describes so well and handsomely.

This is an excellent, useful flora. We need more like it.—JACK MAJOR, Department of Botany, University of California, Davis 95616.

Washington wildflowers. By EARL J. LARRISON, GRACE W. PATRICK, WILLIAM H. BAKER, and JAMES A. YAICK. 376 pp., 64 color plates, 114 figs., 4 maps. Seattle Audubon Society, Seattle. 1974. \$6.45.

Intended as a layman's guide to common Washington wildflowers this book includes 63 families and 1134 species. It was sponsored by 70 individuals and 12 organizations. It is notably free of typographical errors and is sturdily bound and conveniently sized for field use. Superficially, the guide is impressive, but beyond the colors and neat print an unfortunate disappointment exists.

Plants in figures 16, 20, 24, 27, 28, 33, and 63 are grossly misidentified; plate 19, identified as *Draba*, is a *Stellaria*. Figures 38 and 67 are printed upside down. Many b/w photos are of marginal quality, and some of people and general scenes contribute little to the guide's purpose. The authors stress wildflowers, but some photos of weedy species, instead of native, were used for illustrations.

To exclude weedy, shrubby, and less common species, as was the intent, a work must confront problems of definition. This was not done and arbitrariness is obvious. For example, the shrub *Potentilla fruticosa* is listed, whereas herbaceous *Rubus pedatus* and *R. pubescens* are not; *Lepidium perfoliatum* and other non-native plants are given, but common naturalized plants, e.g., *Conium maculatum*, *Nymphaea odorata* are not. *Pedicularis rainierensis*, a Mt. Rainier endemic appears, but *Tauschia stricklandii*, also a Rainier endemic, does not. Many common plants are also omitted, e.g., *Aster chilensis*, *Senecio pauperculus*. *Calypto bulbosa* is not "endangered", as stated.

The discrimination against common naturalized or weedy species will stump some users of the book. At least 35 common genera are excluded. The publication would be strengthened by the addition of some of those genera. As is, the guide user should avoid botanizing roadsides or disturbed areas. In general, the treatment appears stronger for west of the Cascades and less comprehensive for northeast and central Washington.

Arrangement of families is phylogenetic; however, genera and species appear in the order they artificially key out. This arrangement of genera and species is inconvenient and makes it difficult to locate taxa except by index. The guide would be easier to use if taxa had been listed alphabetically. Keys are stressed by the authors

as being simple to use: measurements are given in inches vice metric units; some terms are simplified; and fewer species are treated. Otherwise, key leads seem similar to those in Hitchcock and Cronquist's *Flora of the Pacific Northwest*. Absent are remarks about herbaria and their use in plant systematics; nor is there acknowledgment to regional works that make local guides possible.

Topical essays are located in the body of the keys, apparently to minimize technical reading burdens for laymen. Topics appear in random order and are not indexed. It may be diversionary and undemanding to stumble across the essays, but for interested persons it is a burden.

A discussion on plant habitats is general and loose. Specific features—dune, salt marsh, rain forest—are mentioned for western Washington, but for elsewhere the authors revert to geologic provinces and Merriam's life zones. Life zone maps were taken from C.V. Piper's *Flora of the State of Washington*, 1906. Franklin and Dryness' *Natural vegetation of Oregon and Washington* (USDA For. Ser. Tech. Rept. PNW-8, Portland, 1973) apparently was not consulted, but Daubenmires' *Forest vegetation of eastern Washington and northern Idaho* (Wash. Agr. Expt. Sta. Bull. 60, 1968) is mentioned.

Statements such as, "Technical manuals treating the flora of Washington are for the most part sparsely illustrated", strain credulity in view of two major illustrated floras for the area. Another, "... grouping by flower color is not feasible, as there are relatively few flower colors", overlooks Philip Munz' guides to California wildflowers, and Peterson and McKennys' *A field guide to wildflowers of northeastern and northcentral North America*, 1968.

Responsibilities for deficiencies in *Washington wildflowers* belong to the professionals who authored the book, not the well-intentioned sponsors or enthusiasts who encouraged the production. Unfortunately, an unsuspecting public may bear the cost.—EARLE F. LAYSER, Nez Perce National Forest, Grangeville, Idaho 83530.

Profiles of California vegetation. By WILLIAM B. CRITCHFIELD. 54 pp., 1 fig., 57 profiles. U.S.D.A. Forest Service Research Paper PSW-76. 1971. \$2.50.

The distribution of forest trees in California. By JAMES R. GRIFFIN and WILLIAM B. CRITCHFIELD. 114 pp., 3 figs., 84 maps. U.S.D.A. Forest Service Research Paper PSW-82. 1972. \$1.75. Both available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

These two volumes are contemporary compilations based largely on results of the California Vegetation Type Map Survey (VTM) conducted by the U.S. Forest Service some 35 years ago. The history of this ambitious project, which involved field mapping of dominant vegetation and extensive documentation with herbarium specimens, is briefly described in each publication. Both are of great potential usefulness to those engaged in ecological studies in the forested portions of California and the Lake Tahoe-Sierran corner of Nevada, which also came under jurisdiction of the VTM survey. These publications are avowedly of limited or no usefulness in the transmontane deserts of the south and the Great Basin intrusions of the north of California. With these exceptions, the two volumes, together with the original published vegetation type maps (see MADROÑO 22:153), provide a very good picture of forest and other vegetation in much of California in the 1930's. It is hardly surprising that vast changes have occurred in California's vegetation in the four intervening decades, but it is very lucky for those investigating these changes that such thorough evidence from the past is available for comparison.

The bulk of the first publication is devoted to 57 elevational profiles with vegetation symbols, representing north-south or east-west transects of quadrangles surveyed by VTM teams. They were drafted by M. N. Dobrotin to accompany maps of